

The Sustainable Fishery of the Seris

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The Seri or Comcaac are an indigenous people that up to a few decades ago still practiced a semi-nomadic hunter/gatherer lifestyle among the islands of the Gulf of California, in Northwest Mexico. Wars of extermination carried out first by Spaniards, and then by independent Mexico (hostilities did not end until the early 20th Century), took them to the brink of extinction and only about 600 remain today.

In the 1930s the federal government abandoned its extermination and relocation strategy and instead tried to settle the Seri in two villages within their territory, El Desemboque and Punta Chueca, by facilitating the creation of a fishing cooperative. The shark fishery was heavily promoted, particularly for the extraction and processing of livers to yield vitamins. But with the



advent of synthetic vitamin production in the 1940s, the fishery collapsed and the Seri turned to hunting sea turtles, which in turn was banned by the 1980s. Meanwhile during the 1970s outsiders discovered a profitable scallop fishery just off-shore which fueled an influx of non-Seri fishermen into the region.

In an effort to correct past wrongs and help the Seri survive, the Mexican government granted the

Seri collective ownership of a fraction of their historical range in 1975. This included Isla Tiburon (Shark Island) and the land across from it on the mainland, as well as exclusive fishing rights to the surrounding waters. Unfortunately, the exact limits of these waters were never properly established and a lack of vigilance from authorities has restricted the Seri Exclusive Fishing Zone to the channel between the Island and the Mainland, which is narrow enough to allow the community to control access.

Free from government interference in their affairs, the Seri community has developed a set of rules that has allowed catches within this small channel to remain stable over the past thirty years, while the productivity of much

larger neighboring fisheries has collapsed by up to 90%. The successful management of their tiny fishery has now been recognized by their neighbors, and the lessons learned are being used to implement similar programs in neighboring communities.

Though several different species of fish, crustacean and mollusk are harvested in the channel, the scallop fishery offers us a good example of just how the Seri use cultural, social and biological knowledge to effectively manage their fisheries.

Though Seri do participate in the commercial scallop fishery, most are reluctant to dive and so most of the fishing is done by outside crews. To be granted access to the channel, outsiders must 1) pay an entrance fee, 2) hire a Seri as member of the crew at the same wages (not only does this increase employment, but it allows the Seri to monitor the outsiders), 3) avoid fishing in the sandbar areas which are restricted to subsistence fishing mentioned below, and 4) agree to a catch limits.

The subsistence scallop fishery is a traditional activity which takes place during the lowest tides of the year, in which shallow waters allow the scallops to be harvested by women and children, without diving. Historically it has been an important social & cultural event in Seri society, and also serves to monitor the overall health of the fishery. When these harvests are low, social repercussions can be harsh: women might humiliate the men in public for being careless with such a valued common resource, and the men in turn will blame the outsiders and cancel all access until tempers cool, stocks recover or economic necessity forces them to issue permits once again.

The fishermen's deep knowledge of the fishery itself also enhances its sustainability. By capturing only the largest scallops, they increase the likelihood that any animal caught has already reproduced. And by abstaining from diving in seasonal seagrass beds, where the work is harder and one is more likely to step on stingrays and crabs, they ensure that over 10% of the channel is off-limits for at least 8 months a year. Finally, the Seri are well tuned to both the abundance and size of their catch, and rotate fishing grounds regularly, with some sites being visited several times a year, and others only once every few years.

Their success has allowed them to begin sending their children to university, and in 1998 for the first time the younger generation won local elections and a college graduate was elected as their leader. With these changes the Seri have begun cooperating with NGOs and universities, who are trying to replicate their model in other communities. They have become certified by

the Marine Stewardship Council, and branched out into other ventures, such as a Women Artisans Cooperative that sells arts and crafts to tourists; and a Sea Turtle Conservation program that has won international awards.

It is obvious that one of Mexico's smallest minorities has a lot to teach the rest of us.